## Project Design Phase-II
## Solution Requirements (Functional & Non-functional)

| Date | 25 June 2025 |
|---|---|
| Team ID | LTVIP2025TIMID20837 |
| Project Name | ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data |
| Maximum Marks | 4 Marks |

# Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|---|---|---|
| FR-1 | User Registration | Registration through Form<br>Registration through Gmail<br>Registration through Linked IN |
| FR-2 | User Confirmation | Confirmation via Email<br>Confirmation via OTP |
| FR-3 | Dashboard Interaction | Apply filters by Region, Year, Toy Type<br>View sales trend charts (line/bar/heatmap)<br>Download visualization snapshots as PNG/PDF |
| FR-4 | Data Upload & Management | Upload toy sales dataset (CSV/Excel)<br>Validate and clean dataset<br>Map dataset columns to dashboard fields |
| FR-5 | User Feedback Collection | Submit toy preferences via survey form<br>View survey results (charts/summary)<br>Vote on top toys for a given season |
| FR-6 | Admin Dashboard | Manage users (approve/restrict access)<br>Monitor dashboard usage (views, activity logs)<br>Update or refresh datasets |

# Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|-------------|
| NFR-1 | **Usability** | The dashboard should be intuitive and easy to navigate for users with minimal data literacy, including filters, tooltips, and charts that are clear and understandable. |
| NFR-2 | **Security** | User data and login credentials (especially for survey participants or registered users) must be protected using authentication protocols and secure storage (e.g., HTTPS, password hashing). |
| NFR-3 | **Reliability** | The platform must consistently load dashboards and visualizations without errors or data corruption. Data integrity should be ensured during uploads and visual refreshes. |
| NFR-4 | **Performance** | Visualizations should load within 3–5 seconds for standard datasets (up to 10,000 records). Performance should not degrade noticeably with filtering or interaction. |
| NFR-5 | **Availability** | The system (dashboard and data access) should be available 95% of the time during academic project hours or public viewing periods, ensuring stakeholders can access it when needed. |
| NFR-6 | **Scalability** | The system should support future integration with larger datasets (e.g., multi-year sales data) and more users (e.g., across regions or institutions) without requiring complete redesign. |